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Sensory Ethnography and Interaction Design in Immersive Higher Education

Authors: Anna-Kaisa Sjolund

Abstract: The doctoral thesis examines interaction design and sensory ethnography as tools to create immersive education environments. In recent years, there has been increasing interest and discussions among researchers and educators on immersive education like augmented reality tools, virtual glasses and the possibilities to utilize them in education at all levels. Using virtual devices as learning environments it is possible to create multisensory learning environments. Sensory ethnography in this study refers to the way of the senses consider the impact on the information dynamics in immersive learning environments. The past decade has seen the rapid development of virtual world research and virtual ethnography. Christine Hine's Virtual Ethnography offers an anthropological explanation of net behavior and communication change. Despite her groundbreaking work, time has changed the users' communication style and brought new solutions to do ethnographical research. The virtual reality with all its new potential has come to the fore and considering all the senses. Movie and image have played an important role in cultural research for centuries, only the focus has changed in different times and in a different field of research. According to Karin Becker, the role of image in our society is information flow and she found two meanings what the research of visual culture is. The images and pictures are the artifacts of visual culture. Images can be viewed as a symbolic language that allows digital storytelling. Combining the sense of sight, but also the other senses, such as hear, touch, taste, smell, balance, the use of a virtual learning environment offers students a way to more easily absorb large amounts of information. It offers also for teachers' different ways to produce study material. In this article using sensory ethnography as research tool approaches the core question. Sensory ethnography is used to describe information dynamics in immersive environment through interaction design. Immersive education environment is understood as three-dimensional, interactive learning environment, where the audiovisual aspects are central, but all senses can be taken into consideration. When designing learning environments or any digital service, interaction design is always needed. The question what is interaction design is justified, because there is no simple or consistent idea of what is the interaction design or how it can be used as a research method or whether it is only a description of practical actions. When discussing immersive learning environments or their construction, consideration should be given to interaction design and sensory ethnography.

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